

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	4762358
<b>Application Number:</b>	10619796
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	7886
<b>Title of Invention:</b>	Sparse and efficient block factorization for interaction data
<b>First Named Inventor/Applicant Name:</b>	Francis X. Canning
<b>Customer Number:</b>	20995
<b>Filer:</b>	Lee W. Henderson/Shirley Martinez
<b>Filer Authorized By:</b>	Lee W. Henderson
<b>Attorney Docket Number:</b>	CANNING.001CP2
<b>Receipt Date:</b>	09-FEB-2009
<b>Filing Date:</b>	15-JUL-2003
<b>Time Stamp:</b>	20:35:08
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$65
RAM confirmation Number	5146
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The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

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Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

**File Listing:**

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		Response_to_OA_CANNING_002CP2.pdf	549478 8850a721839d86d820e8847c456a59cd00075029	yes	11
	<b>Multipart Description/PDF files in .zip description</b>				
	<b>Document Description</b>		<b>Start</b>	<b>End</b>	
	Amendment/Req. Reconsideration-After Non-Final Reject		1	1	
	Claims		2	7	
	Applicant Arguments/Remarks Made in an Amendment		8	11	

**Warnings:****Information:**

2	Fee Worksheet (PTO-06)	fee-info.pdf	30387 5748bd6e94280531bfc43f763d04b48c818ff527	no	2
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**Warnings:****Information:**

<b>Total Files Size (in bytes):</b>			579865
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**New Applications Under 35 U.S.C. 111**

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

**National Stage of an International Application under 35 U.S.C. 371**

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

**New International Application Filed with the USPTO as a Receiving Office**

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.